LA CAPACIDAD PARA ADAPTARSE:
EXAMPLES OF RESILIENCE AMONG OYENDO BIEN PARTICIPANTS

by

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As members of the Audiology Doctoral Project Committee, we certify that we have read the project prepared by Adriana J. Sanchez, titled *La Capacidad Para Adaptarse: Examples of Resilience Among Oyendo Bien Participants* and recommend that it be accepted as fulfilling the Audiology Doctoral Project requirement for the Degree of Doctor of Audiology.

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DEDICATION

This work is dedicated to my amazing children, Adrian David, and Olivia Mercedes Sanchez. I love you so much. The two of you inspired me to overcome the barriers I faced to provide a better future for us. Remember: you can do anything you set your mind to and never stop reaching for your dreams! No matter the odds or what other people tell you. To my Mom, Sylvia Garcia. You are the most resilient person I know, and I would have never gotten this far without your wisdom and unwavering support. Muchísimas gracias to my family, friends, classmates, and professors for all of your encouragement and help. Every single one of you contributed to my success by helping me remain resilient through challenging times and you have my deepest gratitude.

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ABSTRACT

Purpose:

Group audiologic rehabilitation programs provide social support, health education, and skills that help individuals living with hearing loss cope with the effects on communication and quality of life (Montano & Spitzer, 2014). This study utilized a qualitative research approach to document examples of resilience among individuals with hearing loss and their family members within a group hearing health education and support intervention in a rural, Mexican-American, Spanish speaking community.

Methods:

A retrospective analysis of previously coded family focus group sessions (n=27) and interviews with patients with hearing loss (n=20) examined examples of resilience that emerged through discussion. Prospectively, audio recordings were obtained for Groups 11 and 12 of the Oyendo Bien intervention (n=27 enrolled, observed n=13). Discussions from sessions 1, 3, and 5 were audio recorded, transcribed, and coded. A codebook detailing resilience as a construct was developed based on qualities, processes, and assets of resilience based on criteria documented in resilience research (Bermudez & Mancini, 2013; Richardson, 2002; Walsh, 2002; Yorgason, Piercy, & Piercy, 2007). All coding was completed in Spanish, with translation to English for reporting results. Two independent raters completed the coding.

Results:

Examples of resilience were found retrospectively (within the needs assessment) and prospectively (among group discussions in the intervention). Cultural aspects of resilience (familismo, personalismo, respeto, spirituality, and fatalismo) and resilience processes (making meaning of hearing loss, using coping strategies and family support) were present across both

data sources. Self-efficacy and humor were more commonly observed in group intervention discussions (prospective group).

Conclusions:

Examples of resilience among Oyendo Bien participants highlight participant strengths and may be a future source of increasing resilience, acceptance, and coping when living with hearing loss. Incorporating aspects of resilience into aural rehabilitation may help enhance participants resilience which may help increase better quality of life.

KEYWORDS: Resilience; Community health workers; hearing loss; Spanish; aural rehabilitation groups

INTRODUCTION

Approximately 2 out of 3 adults over the age of 70 years have a bilateral hearing loss (Goman & Lin, 2016). Hearing loss prevalence in Hispanic/Latino adults is similar to the general population (Cruickshanks et al., 2015). Even though hearing loss is common among older adults, including the Hispanic/Latino population, only a fraction of the population has access to adequate care to manage the effects of hearing loss on quality of life (Nieman, Marrone, Szanton, Thorpe, & Lin, 2016). It is estimated that only 20% of people with hearing loss who could benefit from treatment sought help (Oyler, 2012). The prevalence of treatment is even lower in communities facing health disparities (Lee, Carlson, Lee, Ray, & Markides, 1991; Nieman et al., 2016). The low prevalence of treatment is made evident in the Mexican-American population as only 4-10% of Mexican-Americans with hearing loss seek treatment (Lee et al., 1991; Nieman et al., 2016).

It is well established that hearing loss can significantly hinder communication and overall quality of life (Ciorba Bianchini, Pelucchi, & Pastore, 2012; Scarinci, Hickson, & Worrall, 2012). Negative effects associated with hearing loss include social isolation, depression, anxiety, and cognitive decline (Ciorba et al., 2012; Pichora-Fuller, 2015). Since communication is a shared experience, it is likely that difficulties associated with hearing loss will impact communication partners as well (Scarinci, Hickson, & Worrall, 2012). In addition to experiencing an increase in communication difficulties, the effects of hearing loss on health and quality of life can stretch beyond the individual level of impairment and can affect family members as well (Scarinci, Hickson, & Worrall, 2011; Stephens & Kramer, 2010). The negative effects of a loved one's health condition on the functioning and quality of life of family members are known as a third-party disability (Scarinci, Worrall, & Hickson, 2009). Previous research has

indicated spouses of older people with hearing loss experience third-party disability as a result of their partners' hearing loss (Scarinci, Worrall, & Hickson, 2009; Scarinci, Hickson, & Worrall, 2011; Scarinci et al., 2012).

Group audiologic rehabilitation programs provide social support, health education, and coping skills to help individuals with hearing loss manage the effects of hearing loss on communication and quality of life (Montano & Spitzer, 2014). Including family members in group audiologic rehabilitation programs may benefit the person with hearing loss and their family (Montano & Spitzer, 2014). This may be more evident within family-oriented cultures such as the Hispanic/Latino culture. The role of family is essential within the Hispanic/Latino culture and can affect the individuals' health-related decision making (del Rio, 2010; Caballero, 2011). This study is a sub-study to Oyendo Bien (Hearing Well), an ongoing large-scale research project that used a community-based participatory research approach to increase access to hearing health care, investigate unmet hearing health care needs, understand the effect of hearing loss on families, and examine the influence of culture on hearing health among older Mexican-American adults and their families.

OYENDO BIEN

Oyendo Bien is a Community Health Worker (known as *Promotoras de Salud* in the Hispanic/Latino community, from this point on referred to as Promotoras) facilitated intervention that was implemented to address disparities in hearing health care access and to improve communication and quality of life among older adults living in a rural, mostly Spanish speaking U.S.-Mexico border community. This is an interdisciplinary project that involves partnerships between research audiologists and academic partners from the Department of Speech, Language, and Hearing Sciences, the College of Public Health, the Department of Spanish and Portuguese,

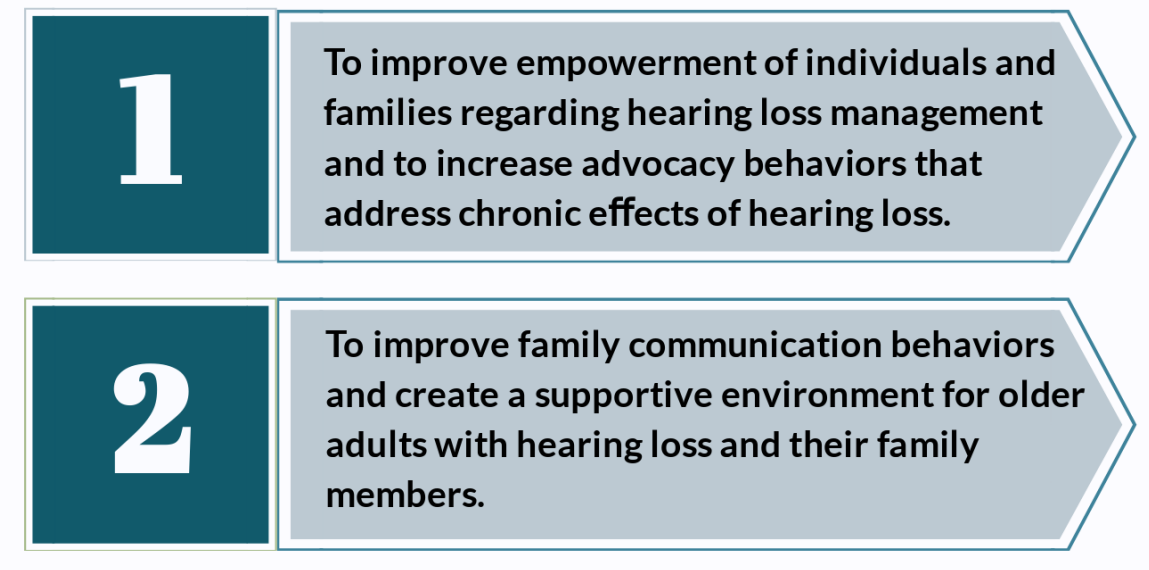
and community partners from a Federally Qualified Health Center (FQHC). This is a large-scale ongoing research project that is currently in the final stages of a randomized control trial. In the first phase of the study, a community needs assessment was conducted (Ingram et al., 2016). Community hearing screenings were held to identify older adults with hearing loss. Family focus groups and interviews with individuals with hearing loss were completed to understand the unmet needs regarding hearing loss within this community as well as interviews with primary care providers and focus groups with community members. Promotora training offered for the full staff included how to recognize the signs and symptoms of hearing loss, use effective communication strategies, and connect community members with hearing health care; additional training for experienced Promotoras covered how to facilitate a hearing loss health promotion program (Sánchez, et al., 2017). A pilot intervention was developed and tested within this community prior to the implementation of the Oyendo Bien intervention (Ingram et al., 2016; Marrone et al., 2017). The intervention is a Promotora-facilitated hearing health education and support intervention program that includes persons with hearing loss and their family members, and consists of 5 weekly sessions, with each session focusing on different aspects of hearing health and hearing loss management.

One aim of the Oyendo Bien intervention was to address not only the barriers that individuals with hearing loss and their family members face but also the facilitators that help people adjust and cope with hearing loss. This is reflected in the intervention targets that were prioritized by the Oyendo Bien research team (Figure 1).

Resilience research addresses facilitators that help families live with hearing loss, as it is an asset-based approach (Stuntzner & Hartley, 2014). Resilience research is applicable in this context as its primary objective is to uncover and promote individual and family strengths to help

families cope with adversity (Patterson, 2002). Resilience research is applicable in this context as its primary objective is to uncover and promote individual and family strengths to help families

Figure 1. Oyendo Bien Intervention Targets



(Marrone, et al., 2017)

cope with adversity (Patterson, 2002). A resilience framework has been used to assist individuals with disabilities to adapt and cope with disability (Stuntzner & Hartley, 2014). Although there is previous research on resilience in other areas of chronic disability, there is little research on how resilience can help individuals and families cope with hearing loss specifically. Observed examples of resilience in the Oyendo Bien intervention may help inform how Oyendo Bien encourages people to adapt and cope with the negative effects of hearing loss and how we can promote resilience among individuals with hearing loss and their family (Stuntzner & Hartley, 2014). These results may also inform the role that Promotoras may have in enhancing resilience in cultural adaptations of group audiologic rehabilitation programs (Sánchez et al., 2017).

RESILIENCE

The definition of resilience can take on different nuances depending upon who and what is being studied. The majority of resilience research describes resilience via protective factors,

assets, or processes (Luthar et al., 2000; Masten & Obradović, 2006). However, a common criticism of resilience research is due to the variations in the definitions and terminology used (Luthar, Cicchetti, & Becker, 2000). For example, Resnick, Gwyther, and Roberto (2011) defined resilience as "encompassing the developmental process of being mindful of and prioritizing those behaviors, thoughts, and feelings that facilitate contentment within a specific developmental, physical, emotional, and spiritual context" (p. 2). Stuntzner and Hartley (2014), define resilience as the "ability to learn and enhance personal skills and characteristics following the presence of a disability which can be used and refined to help them cope with their situation and disability-related experiences, improve personal insight and knowledge of their skills and potential to overcome challenging life events, and to live in a way that reflects a better quality of life" (p.2). While Luther et al. (2000), defines resilience as "A dynamic process of maintaining positive adaptation and effective coping strategies in the face of adversity" (p. 543). Some resilience definitions pertain to positive developmental outcomes in high-risk individuals while others specify the individual have better-than-expected outcomes (Luthar et al., 2000). Another criticism within resilience research depends on inconsistencies in the conceptualization of resilience as being trait based or for it to be a dynamic process (Luthar et al., 2000). Resilience itself is broad and encompasses many characteristics that are related to positive adaptation when faced with adversity (Masten & Obradović, 2006). The resilience definition used for this study described resilience as being a dynamic process that incorporates positive adaptation and effective coping in the face of adversity (Luthar et al., 2000). We applied this concept that at its core, resilience is not a fixed, innate trait but is flexible and all individuals have some previously established resilience capacities (Stuntzner & Hartley, 2014; Walsh, 2002; Yorgason, Piercy, & Piercy, 2007).

A description of resilience requires the writer to describe not only the protective factors, active coping or positive adaption but also describe the adversity that one is facing (Masten & Obradović, 2006). After all, resilience is forged through adversity and cannot be strengthened without risk or threat (Walsh, 2006). Adversity can take many forms and individuals and families may be faced with acute or chronic challenges (Bermudez & Mancini, 2013). Recent findings of the Oyendo Bien research project has indicated hearing loss has a negative impact on family relationships, communication, and overall quality of life (Ingram et al., 2016; Marrone et al., 2017). This study included aspects of individual resilience, family resilience, resilience in disability, and cultural aspects of resilience to examine examples of resilience in older Mexican-American adults and their families facing hearing loss. Each of these components will next be defined.

FAMILY RESILIENCE

Resembling third-party disability, family resilience is based on the idea that it is not only the individual who is affected by adversity but the family as well (Walsh, 1996). Family resilience involves more than solely surviving adversity but also considers key processes that mediate the adaptation to hardships and challenges as well as recognizes the familial and individual potential for transformation and growth in the face of adversity (Walsh, 2002). A family resilience framework was developed to apply family resilience processes in clinical and research practice (Walsh, 2002). This framework describes three domains of family functioning: family belief systems, organization patterns, and communication with each domain comprising of different key processes of family resilience (Walsh, 2002). Family belief systems are described as being the "heart and soul" (Walsh, 2006, p. 49) of resilience and includes resilient processes such as making meaning of adversity, positive outlook, transcendence and spirituality,

and transformation. Organization patterns are described as being "family shock absorbers" (Walsh, 2006, p. 83) and resilience processes include flexibility, connectedness, social and economic resources. Communication processes are described as processes that facilitate mutual support and problem solving (Walsh, 2006). Communication processes include clarity, open emotional sharing, and fostering positive interactions (Walsh, 2002). This study utilized aspects of family resilience framework and resilience in disability to verify if examples of resilience emerge through discussion among Oyendo Bien participants (Figure 2).

Figure 2. Family Resilience Framework Processes: Processes used in the analysis and how they pertain to the three domains of the family resilience framework. Italicized processes are from the codebook.

RESILIENCE IN DISABILITY

Extensive research has indicated resilience can be an important factor in helping individuals successfully manage illness and disability (Hartley & Mapes, 2015; Stewart & Yuen, 2011). A systematic review of resilience in individuals with physical illnesses and diseases such as cardiovascular disease, HIV/AIDS, diabetes, cancer, and rheumatoid arthritis, was completed to determine factors associated with predicting or promoting resilience (Stewart & Yuen, 2011). Results indicated psychosocial factors such as self-efficacy and optimism, family and social support, the use of coping strategies and benefit finding or finding meaning within an event, were associated with resilience (Stewart & Yuen, 2011). Another study examined resilience in families of children with autism (Bayat, 2007). Results highlighted finding meaning in disability and strengthening family bonds to be important resilience processes.

Although there is previous research on resilience in other areas of chronic disability, there has been limited research on how resilience helps individuals and families cope with hearing loss, specifically. One study explored couple resilience in individuals with age-related hearing loss (Yorgason, et al., 2007). Results suggested couples found meaning in hearing loss through acceptance and understanding of the limitations they experienced with hearing loss. Making meaning of hearing loss was further established through the couple's expressions of values and beliefs. Comments reflecting gratitude, optimism, and humor were indications of successful coping and positive adaptations to negative effects of hearing loss (Yorgason, et al., 2007).

RESILIENCE IN HISPANIC/LATINOS

Cultural values and beliefs are also important to consider when examining resilience (Bermudez & Mancini, 2013; Cardoso & Thompson, 2010; Walsh, 2006). Culture has been described as relating to the meaning of life within a group of people (Yee-Melichar, 2011).

Culture affects how people form external support and network systems, how people work and live, determines what abilities and skills are valued, and is a vital part of identity (Yee-Melichar, 2011). Furthermore, it has been reported that there are important links between resilience, culture, and health outcomes in Latino culture (Bermudez & Mancini, 2013; Gallo, Penedo, Espinosa de los Monteros, & Arguelles, 2009). Hispanic/Latino cultural values contributed to better health outcomes and health behaviors with cancer, cardiovascular disease, hepatitis C viral infection, psychological well-being, and stress (Davila, Reifsnider, & Pecina, 2011; Gallo et al., 2009; Mogro-Wilson, 2011). It has also been reported that having a strong cultural connection can help enhance resilience within aging individuals (Yee-Melichar, Boyle, Wanek, & Pawlowsky, 2014).

Some key aspects of resilience and culture among Hispanic/Latinos include *familismo*, *personalismo*, *respeto*, *fatalismo, and spirituality* (Bermudez & Mancini, 2013; Caballero, 2011; Cardoso & Thompson, 2010). *Familismo* is considered to be one of the most salient factors in resilience among Hispanic/Latinos as family life is significant to most Latinos (Bermudez & Mancini, 2013). *Familismo* embodies several cultural characteristics such as loyalty to the nuclear and extended family, solidarity, and the view that the needs of the family come before individual needs (Cardoso & Thompson, 2010; Mogro-Wilson, 2011). *Familismo* highlights the importance of connectedness within the family and the obligation to care for nuclear and extended family members (Mogro-Wilson, 2011). *Personalismo* emphasizes the importance of having positive interpersonal relationships (Bermudez & Mancini, 2013; Caballero, 2011; del Rio, 2010). *Respeto* or respect impacts and guides differential behavior in social interactions based on a person's authority, age, gender, and socio-economic status (del Rio, 2010). *Fatalismo* refers to the belief that one's destiny is beyond his or her control and has been described as being

a form of acceptance, especially in situations that cannot be changed (Bermudez & Mancini, 2013; Mogro-Wilson, 2011). *Spirituality* is another reported Hispanic/ Latino cultural aspect that ties with resilience (Mogro-Wilson, 2011). Hunter-Hernández, Costas-Muñíz, and Gany (2015) reported spirituality is an important core cultural Hispanic/Latino value and is a resource in enhancing resilience among Hispanic/Latino patients.

Bermudez and Mancini (2013) adapted Walsh's (2002) family resilience framework to include Hispanic/Latino cultural beliefs to be used as a preliminary framework to understand and help enhance resilience within Hispanic/Latino families. This adapted framework was used as a guideline to see how these cultural aspects can be considered when looking for examples of resilience within a Latino/Hispanic population.

PURPOSE OF THIS CURRENT STUDY

The purpose of this research study was to investigate examples of resilience among Mexican-American older adults with hearing loss and their family within a group hearing health education and support intervention in a rural, Mexican-American, Spanish speaking community.

METHODS

STUDY DESIGN

This study utilized a retrospective and prospective qualitative study design. The retrospective portion of this study analyzed data from the needs assessment of a previously published Oyendo Bien qualitative study (Ingram et al., 2016; Marrone et al., 2017). The prospective portion of this study analyzed data from the ongoing Oyendo Bien intervention.

DATA COLLECTION AND PROCEDURES

Data collection for the retrospective portion of this study utilized community-based participatory research methods to engage community partners from a federally-qualified health center (FQHC) to identify community needs regarding hearing loss. Community-based participatory research (CBPR) emphasizes collaborative partnerships between community members, organizations, healthcare providers, and researchers to spread knowledge and address local problems (Berge, Mendenhall, & Doherty, 2009). A key distinction between CBPR and solely performing research within a particular community place or setting is that CBPR incorporates active involvement of community partners and researchers in all aspects of the research process (Israel, Schulz, Parker, & Becker, 1998). Hearing screenings were offered as a service to engage the community and to recruit a mix of those who were currently served and unserved by the hearing health care system. Promotoras of an FQHC led group discussions and interviews in Spanish using interview guides based on the theoretical frameworks for the needs assessment (socio-ecological model and health belief model). Interviews, focus groups, and assessment questions were collaboratively developed by the researchers and community partners pertaining to hearing loss and how hearing loss affects those in the community. Previously

transcribed and coded data from the needs assessment (retrospective) were coded and analyzed (Figure 3).

Figure 3. Procedures for the Needs Assessment

**Needs assessment data included in this study.*

The prospective portion of this study sampled the beginning, middle, and end of the Oyendo Bien intervention via audio recordings from sessions 1, 3, and 5. Discussions from the intervention sessions (prospective) were transcribed, coded, and analyzed. A codebook detailing resilience as a construct was developed. Specific elements that were coded include qualities, processes, and assets of resilience based on criteria from resilience research (Bermudez & Mancini, 2013; Richardson, 2002; Walsh, 2002; Yorgason, Piercy, & Piercy, 2007) (Figure 1.). Coding and analysis were completed using MAXQDA 2018 coding software. All coding was in Spanish, with translation to English for the purpose of reporting results.

PARTICIPANTS

There were 74 total participants for this study (Table 1). Focus group and interview transcripts that included 47 adult participants of the Oyendo Bien needs assessment were analyzed. Within the needs assessment, 27 participants were from focus groups and 20 participants were people with hearing loss who completed semi-structured interviews.

Table 1. Participants included in the study: Community engagement and demographics

Community engagement and demographics	Male	Female	n=
Family Focus Groups (3) (Retrospective)	7	20	27
Interviews with Adults with hearing Loss (20) (Retrospective)	6	14	20
Group 11 Oyendo Bien Intervention (Prospective)	4 (3)	9 (5)	13
Group 12 Oyendo Bien Intervention (Prospective)	3 (3)	11 (5)	14
Totals * (Observed) n=16	**20**	**54**	**74**

COMMUNITY SETTING

Oyendo Bien is based out of a rural U.S.-Mexico border community within Santa Cruz County in Arizona. Santa Cruz County has approximately 50,000 residents with a population that is approximately 95% Hispanic/Latino (Arizona Department of Administration, 2017). The FQHC is the largest health-care provider in the county and provides medical, dental, and preventative care, to approximately 22,000 patients, the majority of whom are Hispanic/Latino (90%) (Ingram et al., 2016; Marrone et al., 2017).

ANALYSIS

A codebook detailing resilience as a construct was developed (Figures 4-6). Specific elements that were coded included qualities, processes, and assets of resilience based on criteria from resilience research (Figure 2) (Bermudez & Mancini, 2013; Walsh, 2002; Richardson, 2002; Yorgason, et al., 2007). All coding was in Spanish, with translation to English for the purpose of reporting results. The previously coded needs assessment data was coded by two members of the Oyendo Bien research team using NVivo (QSR International, Melbourne) software. The coders used pre-defined constructs that were agreed upon by the research team.

The coding and analysis used theory-based coding and coding that assessed health beliefs, cultural influences, and quality of life (Ingram et al., 2016).

The retrospective analysis included transcripts from previously coded constructs (Communication, Cues to Action, Efficacy, Culture, and Family) that have been associated with resilience processes in the published literature. Inter-rater agreement for the constructs that were included in the retrospective analysis was greater than 86%. For the prospective analysis, two members of the research team (coders) separately coded three transcripts each of the Oyendo Bien group intervention sessions using MAXQDA coding software. After initial coding, the two coders evaluated and discussed the codes that were not in agreement to reach consensus. Re-coding of the data was then performed to obtain inter-rater agreement. Inter-rater agreement for the prospective analysis was greater than 88%. Content analysis of the coded retrospective and prospective data was then completed to explore examples of resilience that emerged through Oyendo Bien participant discussions. Frequency analyses across retrospective and prospective data were completed to identify and understand themes from the data analysis. (See Appendix A for results).

Figure 4. Resilience codebook with resilience process descriptions: Family Belief Systems

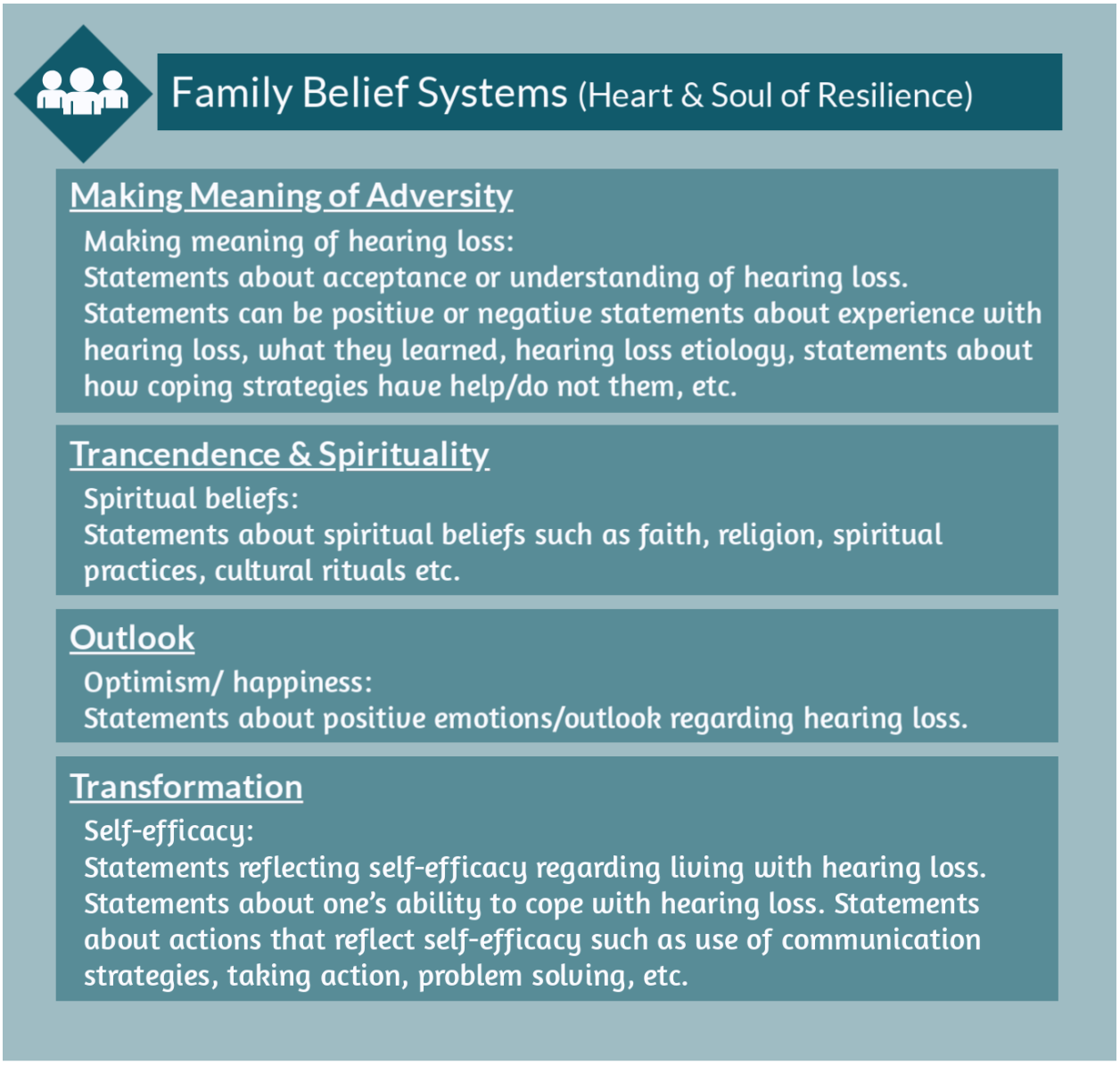


Figure 5. Resilience codebook with resilience process descriptions: Organizational Patterns

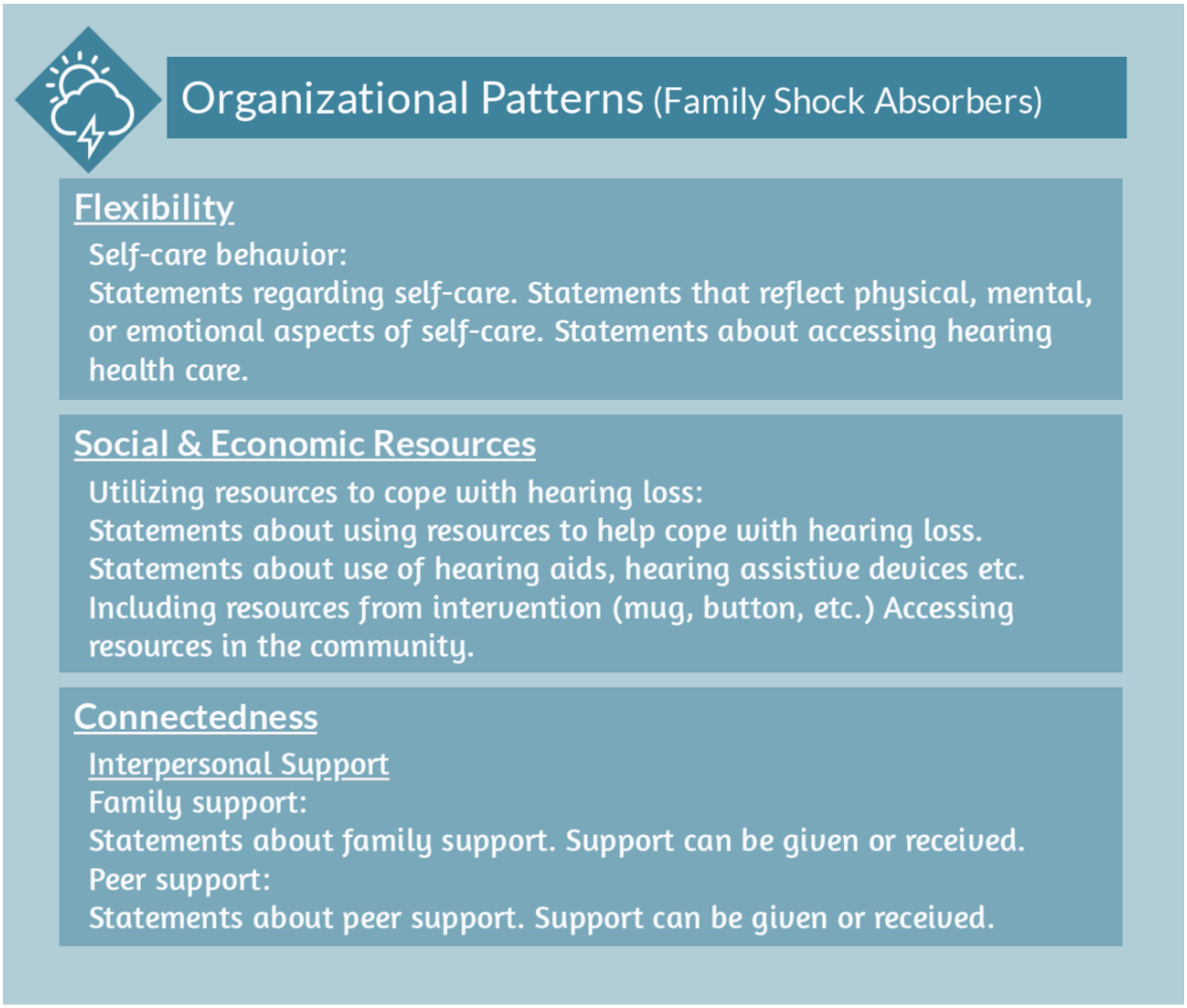


Figure 6. Resilience codebook with resilience process descriptions: Communication

RESULTS

FREQUENCY ANALYSES

All codes were represented in these analyses. There were a total of 2116 coded segments across both retrospective and prospective analyses. Making meaning of hearing loss was represented in all transcripts and was coded the most frequently. Family support was also represented in all transcripts. The codes represented the least were spiritual beliefs and behavior change. Within the retrospective data analysis, there were a total of 1094 coded segments. Making meaning of hearing loss was coded most frequently and was represented across all transcripts for the retrospective data. Family support was represented across all transcripts. Behavior change was the least coded as it was not represented in the retrospective data. Among the prospective data, there were a total of 1022 coded segments. Making meaning of hearing loss was coded most frequently for the prospective data. Making meaning of hearing loss, Self-efficacy, Using coping strategies, Family support, and Teaching others were represented across all transcripts in the prospective data analysis.

RESILIENCE PROCESSES

Cultural Resilience Processes. Cultural resilience processes were represented retrospectively and prospectively. *Familismo* was represented in family support, making meaning of hearing loss, using coping strategies, self-efficacy, and teaching others. *Personalismo* was represented within self-efficacy, using coping strategies, informing their doctor, peer support, and teaching others. *Respeto* was present within making meaning of hearing loss and family support. Aspects of *Fatalismo* and *Spirituality* were present mostly within making meaning of hearing loss and spiritual beliefs (Figure 7-10).

Figure 7. Cultural Resilience Processes & the Family Resilience Framework: Familismo

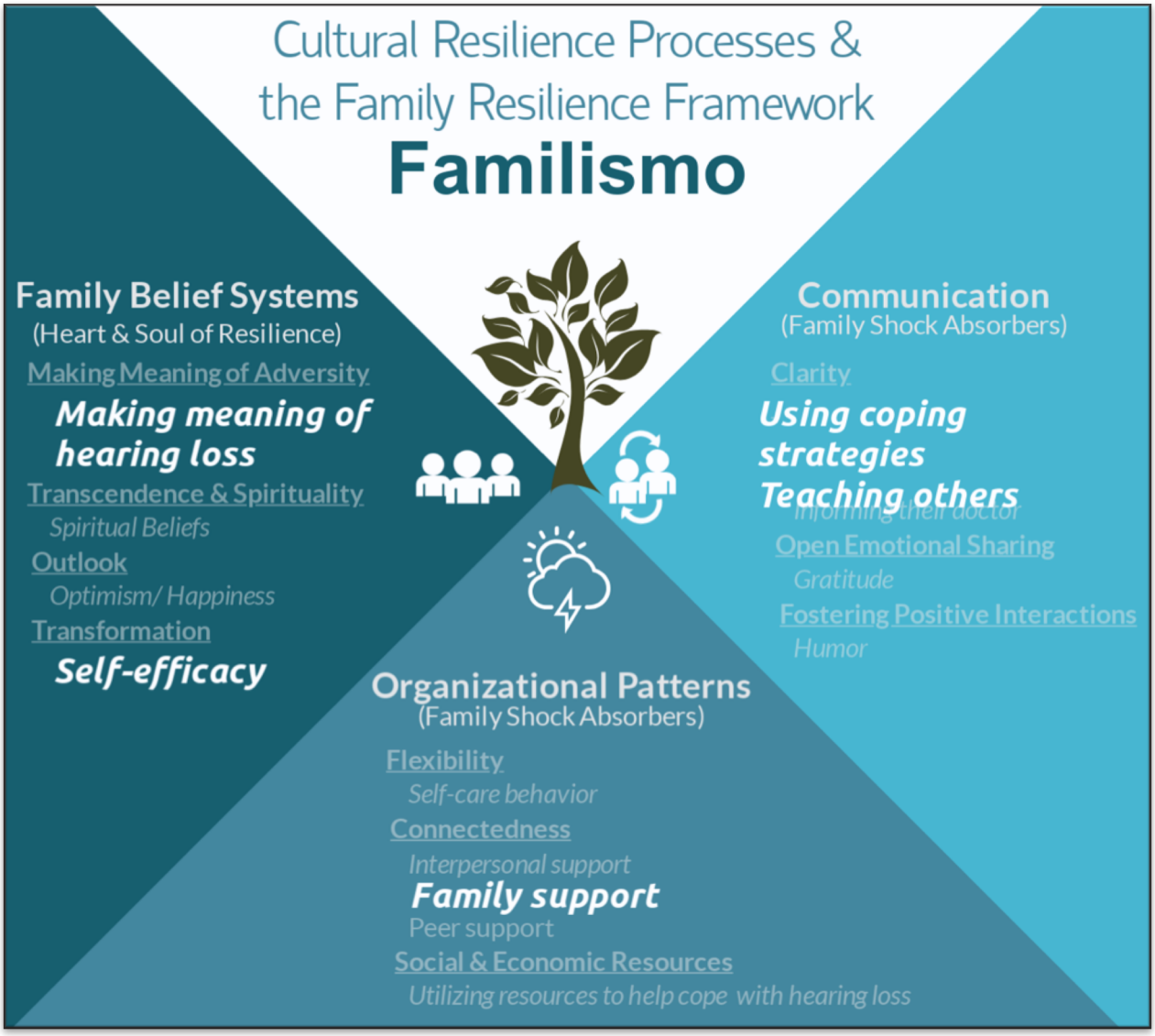


Figure 8. Cultural Resilience Processes & the Family Resilience Framework: Personalismo

Figure 9. Cultural Resilience Processes & the Family Resilience Framework: Respeto

Figure 10. Cultural Resilience Processes & the Family Resilience Framework: Fatalismo & Spirituality

Making Meaning of Hearing Loss. A key process of resilience is making meaning of adversity (Walsh, 2006). Families cope by making meaning of their experience (Walsh, 2006). For this study, making meaning of hearing loss referred to the acceptance and understanding of hearing loss and the effects on quality of life (Yorgason, et al., 2007). Overall, participants agreed that hearing loss had negative effects on the family and they expressed concern and frustration when facing these challenges. Differences in the level of understanding of limitations they faced, and why they faced them, were noted between the retrospective and prospective groups. There was a sense of resignation among most participants in the retrospective analysis of the needs assessment data as they did not think there was much else that could be done about the negative effects of hearing loss.

"Many people assume well, this is how I am, and this is how I'll stay. We don't seek help, but the problem is serious."

"My dad doesn't hear well, and at times I have to tell him something, and he says What? What? How? So, he gets frustrated, and I get frustrated. And out of the three things I have to tell him, I only tell him one. Only the most important."

The participants in the prospective analysis of observations during the intervention were more hopeful than the retrospective group. Similar to the retrospective group, they recognized the challenges associated with hearing loss but were hopeful that something could be done to help manage the hearing loss. In the first session, participants expressed a desire to learn about how to better cope with the negative effects of hearing loss. Participants also expressed a deeper understanding of the effects of hearing loss in that they began to accept the limitations presented with hearing loss and began to do something about it. This became more evident in subsequent sessions.

"I'm happy because we talked, we realized sometimes I wasn't able to understand him, and he wasn't able to understand me, and now we understand each other"

"They're also not going to tell you [about their hearing loss]. Well, here, we are able to [talk about hearing loss], then we will start to lose the shame with our family, then with the doctor, just like he did (referring to a fellow group member)… And just like that, little by little."

Using Coping Strategies. Participants from both retrospective focus groups and prospective intervention groups reported using strategies to repair communication breakdowns. The coping strategies used in the retrospective group were limited to repeating and speaking loudly. Similar to the coping strategies used in the retrospective groups, the main coping strategies used by participants from session 1 were to repeat and speak loudly. Participants reported additional use of coping strategies taught in the intervention in later sessions 3 and 5.

"I talked with her and asked her to face me and speak more slowly."

"Lack of communication is the problem. Because we don't tell people the truth, that we can't hear. Which is important…now we understand. Now we are communicating, and our relationship and everything is better."

Family Support. Family support was represented across both retrospective and prospective analyses. Many participants stated it was their family that encouraged and motivated them to seek help with their hearing problems. A systematic review of resilience in individuals with physical illnesses reported that family support was highly associated with resilience processes and that family support was important to successfully live with physical illness (Stewart & Yuen, 2011).

"I came to the test because my daughter invited me. She noticed I'm having problems and she told me let's go to see if there is a program that could help."

"Family members can understand the person with hearing loss better than others."

An important concept of family resilience is that families view adversity as being a shared challenge (Walsh, 2006). The concept of hearing loss as being a shared challenge was reflected in statements not only about the negative effects of hearing loss on family members but also about families facing the challenges that arise with hearing loss together.

"The family too. They are the ones who are closest to the affected person and they are the ones who, apart from helping them [the person with hearing loss], have to live with their problem as well, right?"

"When I take her to the doctor I have to ask everyone if they are going to take her to do an exam, to please speak to her in her ear because she won't understand what you are going to do if you don't."

"I came [to the intervention] to support him and myself."

Self-Efficacy. Self-efficacy was present across both retrospective and prospective analyses. There was a difference noted in that self-efficacy was less represented in the retrospective group. This is consistent with previously published data on Oyendo Bien (Marrone et al., 2017). Self-efficacy refers to the belief or confidence in one's ability to exhibit or perform a task or specific behavior to obtain a desired outcome (Bandura, 1977, 1997; Dreachslin, Gilbert, & Malone, 2013; Marks, Allegrante, & Lorig, 2005). Self-efficacy is domain specific as it is based on a particular task or context (Dreachslin, et al., 2013). Self-efficacy is also enhanced through supportive family relationships (Walsh, 2002). An example of self-efficacy within the prospective intervention group was noted when the participants were asked what they would say

to a concerned friend whose dad had hearing loss but were unable to purchase a hearing aid for him:

> *"Well, you don't necessarily have to purchase the hearing aids for him if there isn't a means to purchase them. One way or another find a way to communicate to him that he has hearing loss and let him know it is best to continue communicating with each other. Speak to him loudly, slowly, calmly and with a lot of patience."*

Another participant added:

> *"And have him face you when you talk to him, so he can see your lips and know that you are trying to communicate with him. Pay more attention to him so he knows you are aware of his hearing loss."*

Humor. Similar to self-efficacy, humor was represented across both retrospective and prospective data, with the most representation of humor coming from the prospective intervention groups. Humor has been identified to be a form of active coping in that it helps families cope with difficult situations by helping to reduce stress and tension, and helping families accept limitations (Walsh, 2002; Wu, 2013). For example, one couple used humor to explain the importance of using hearing aids by sharing a story of another family member who has hearing aids and does not use them, and another participant described how her family jokes with her.

> *"This is why she says, your brother doesn't hear, but the cabinets do (laughter)."*

> *"They [her family] know [about her hearing loss]. Sometimes my son says, 'my mom looks tougher because she can't hear.' (laughs) They joke with me."*

DISCUSSION

Examples of resilience were present retrospectively and prospectively. Making meaning of hearing loss, using coping strategies, and family support were common across both data sources. Self-efficacy and humor were represented more in the prospective group discussions. The differences between the retrospective and prospective groups may be an indication of enhanced resilience through the intervention, with the caveat that the analysis was not conducted pre-post within participants. Cultural aspects of resilience were present within family support, making meaning of hearing loss, using coping strategies, self-efficacy, teaching others, informing their doctor, peer support, and spiritual beliefs.

Yorgason et al., (2007) noted that for some couples, making meaning of hearing loss occurred when couples became aware, understood possible etiologies, and understood the limitations they faced because of hearing loss. Participants across both analyses became aware of hearing loss through assessment and individualized counseling provided by an audiologist as part of the study (via community screenings for the needs assessment and hearing exams for intervention groups). The sense of resignation within the retrospective group may be a reflection of limited understanding of the limitations of hearing loss and why one faces them. This supports the need to implement interventions that aim to increase knowledge and provide strategies to help cope with the limitations of hearing loss. The sense of resignation may also be a reflection of the cultural value *fatalismo.* Bermudez and Mancini (2013) described statements like “Asi es la vida” (such is life) as a way that Latinos normalize different life experiences and can be an indication that the person is coping and accepting their limitations. However, such perceptions may be at odds with help-seeking for hearing health care, as those who are resigned to their hearing loss may not perceive the benefit of intervention or self-efficacy for its management.

The observed difference of hopefulness in the prospective intervention groups may indicate that the participants believed there was a possible solution to their difficulties related to hearing loss. Observations of participants doing something about the negative effects of hearing loss may be an indication of resilience. The change noted between the first and subsequent intervention sessions may indicate the participants had increased their resilience. Aspects of the Oyendo Bien intervention may help persons with hearing loss and their families enhance resilience by helping them to make meaning of hearing loss.

Family support was represented well between both data sources. This was not surprising as family or *familismo* is described to be a vital aspect of Latino culture (Bermudez & Mancini, 2013). Participants expressed their families to be a source of motivation to seek help for their hearing problems. Participants also viewed hearing loss to be a shared challenge and approached the challenge together. The ability to overcome adversity is strengthened when families pull together and are united (Walsh, 2006).

Participants expressed understanding how hearing loss affects their life and recognized the coping strategies presented in Oyendo Bien as helpful. Stuntzner and Hartley (2014) suggested rehabilitative interventions can support individuals in learning to cope with disability, with multiple potential strategies for supporting the healing process. Additionally, making meaning of hearing loss involved participants better understanding of the limitations that they face with hearing loss and why they face them. Hartley and Mapes (2015) utilized a resilience framework in a rehabilitation project for Veterans with spinal cord injury (SCI). They incorporated teaching on the application of resilience factors to promote positive coping of the limitations individuals with SCI faced in an innovative program that also comprised of group sports and group rehabilitation activities (Hartley & Mapes, 2015). Participants noted that the

resilience curriculum not only helped them work through some of the emotions they were facing due to their disability but also helped them improve overall quality of life (Hartley & Mapes, 2015). Results indicated the resilience curriculum helped to promote positive adaptation and coping factors such as hope and optimism (Hartley & Mapes, 2015). Incorporating a resilience curriculum into aural rehabilitation may help individuals with hearing loss and their family members better cope with hearing loss and improve overall quality of life.

Yorgason, et al., (2007) found humor as helpful in understanding and acceptance of hearing loss. Even though frustrations and challenges can arise with hearing loss, the couples focused on the positive aspects of life. Similar to this, examples of humor were observed in both the needs assessment and observations of the group program. Humor has been described as an active form of coping (Wu, et al., 2013). Observing humor more in the prospective group may indicate that families are actively coping with the challenges they face while they are in the group intervention.

Personalismo was represented in the participant's expressions of wanting to improve their communication abilities to have meaningful connections. P*ersonalismo* is often described to be evident within the clinical setting as the desire to have more meaningful relationships with physicians (Caballero, 2011). This was seen in the participants who decided to inform not only family members, but other people within the community and their physicians about their hearing loss. This was also reflected in self-efficacy, using communication strategies, and teaching others as the participants would teach other people, including their physicians, their needs in order to communicate better.

LIMITATIONS

There were several limitations to this study. There were more female than male participants in this study. Having more evenly distributed participants may change the outcomes. Two possible explanations to the under-representation of male participants within this study is that many of the participants are widows and chose to bring female communication partners (friends or family members) with them, and that individuals within this community work well past the average age of retirement and a lot of husbands were not able to miss work to participate in the intervention.

Aspects of the findings may be specific to this community or sociocultural characteristics of the community (e.g., rural, Hispanic/Latino). There was also attrition from the multi-session intervention. The participant intervention attendance may be an example of resilience in and of itself in that those individuals and their family members are taking action to cope with the challenges they face by simply attending the intervention. The results may, therefore, be skewed towards observing resilience among individuals with hearing loss because those who adhere to the intervention may be those who possess resilience processes.

FUTURE DIRECTIONS

Given that the Oyendo Bien program was not developed to target resilience specifically, it may be interesting to see if implementing aspects of resilience into the Oyendo Bien intervention may help enhance participant resilience and possibly help with participant retention. It would also be interesting to evaluate if there are resilience-enhancing behaviors that the Promotoras utilize to see how their role helps participants better cope with hearing loss. For example, during the intervention, the Promotoras contribute to group discussions by sharing personal stories about their experiences with hearing loss. Typically, this behavior motivates

participants to share their own experiences with the group. Having group facilitators who not only share the participants' language and culture but also share personal stories about themselves may help enhance participant engagement and resilience. This behavior may also reflect the *personalismo* cultural resilience process as the Promotoras tend to engage with the participants in a way that enhances the facilitator-participant relationship.

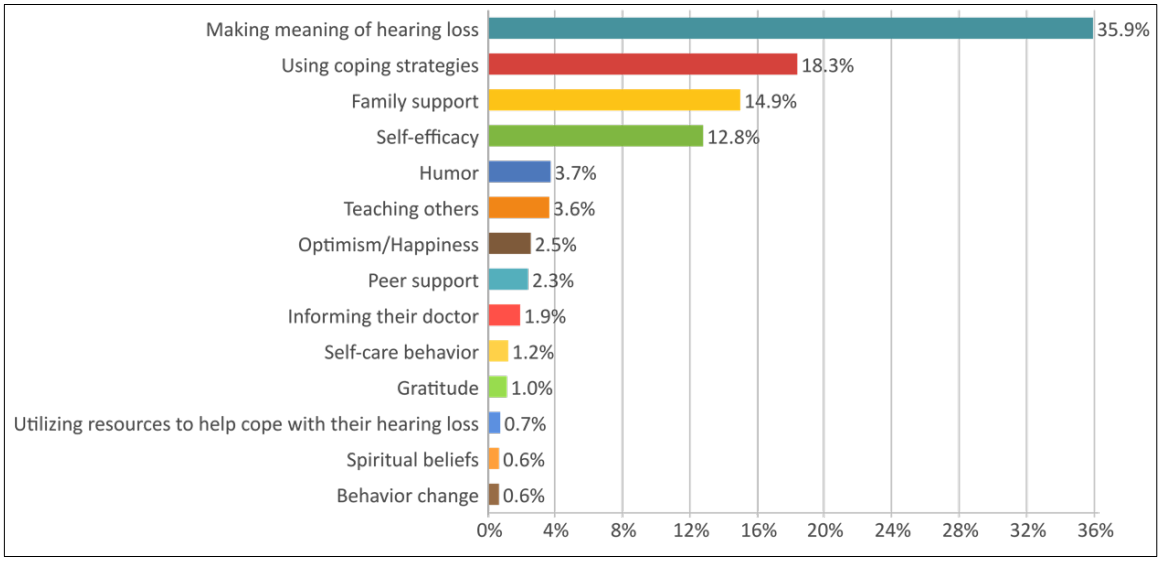
CONCLUSIONS

How families make sense of adversity is one of the most significant aspects of resilience (Walsh, 2006). Resilience interventions focus on highlighting strengths rather than highlighting deficits (Bermudez & Mancini, 2013). Examples of resilience processes noted within the Oyendo Bien intervention may indicate there are existing strengths that we as audiologists can work with to help enhance resilience in people with hearing loss and their family members. Incorporating aspects of resilience into aural rehabilitation may help enhance participants' resilience which may in turn help increase quality of life.

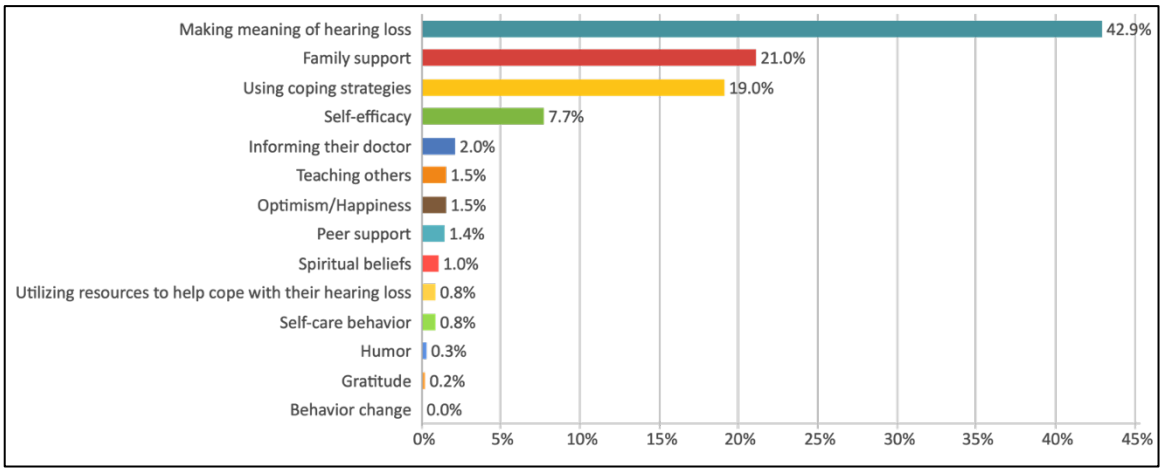
Resilience research is ideally matched with the study of living well with hearing loss in that it not only helps identify the ways individuals cope and adjust to adversity by highlighting strengths but also considers what else can be done to enhance those strengths. Applying resilience intervention strategies to the Oyendo Bien intervention is ideal in that it addresses facilitators that help individuals with hearing loss and their family members cope with hearing loss. Resilience research is also applicable to the Oyendo Bien intervention targets and could potentially help accomplish project aims. Incorporating a resilience framework that also takes cultural aspects of resilience into account is rather significant as it will allow audiologists to capitalize on additional strengths that can potentially help individuals and their families move beyond managing hearing loss to truly living well with hearing loss.

Appendix A: Frequency Analyses Results

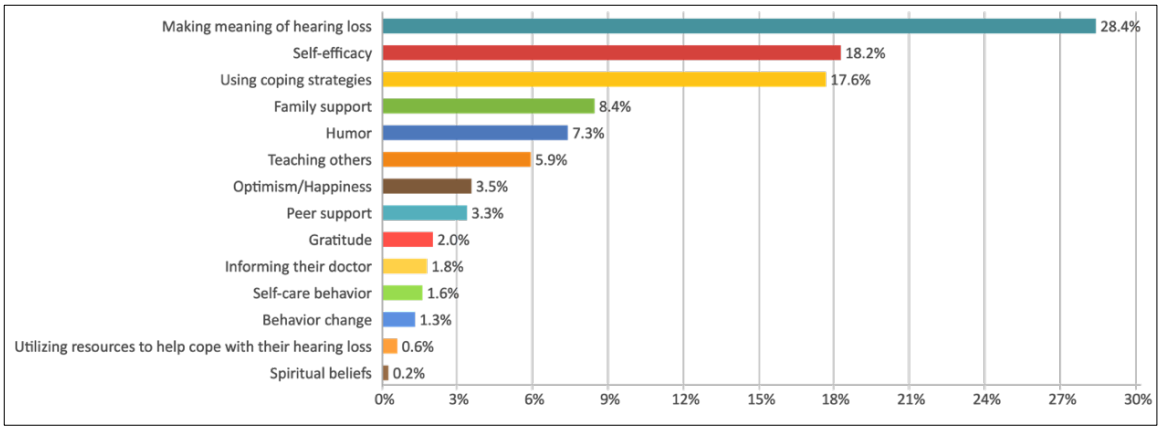
% of code frequencies across retrospective and prospective data analysis



% code frequencies of retrospective data analysis



% code frequencies of prospective data analysis



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